ELOP DCoMPASS™

Digital Compact Multi-Purpose Advanced Stabilized System - UAV

General

The DCoMPASS payload is the one of the newest members of our CoMPASS battle-proven stabilized EO payload family, in service with leading customers worldwide.

- Delivers superb day and night intelligence, surveillance, target acquisition and tactical reconnaissance (ISTAR) capabilities in the harshest weather conditions
- Single LRU configuration integrating up to five EO elements: HD color TV camera with optional low light mode, large format thermal imager, laser target illuminator, eyesafe laser rangefinder (ELRF) and laser target designator
- Lightweight, small size payload made possible by new miniature digital electronics and advanced lightweight materials
- Precise geo-location and pointing capabilities provided by incorporated gimbal IMU (Inertial Measurement Unit)
- Battle proven, military qualified for airborne application

Elbit Systems™ ISTAR

ELOP DCoMPASS

Digital Compact Multi-Purpose Advanced Stabilized System - UAV

Applications

- Border and maritime patrol
- Surveillance
- Law enforcement
- Laser targeting

Main Advantages & Features

- Highly stabilized crystal clear image on both HD color TV and thermal imager
- Compact and lightweight design permits additional payload and fuel capacity in the carrying platform while facilitating future upgrades
- Inertial Measurement Unit (IMU) provides highly accurate geo-location and rock solid stabilization
- Unique in-flight boresight mechanism enables long range precise laser designation
- Simple system integration with helmet mounted systems (HMS), radar and fire control applications
- Advanced video enhancement package including: haze penetration, color restoration and sharpening features
- Step & Stare feature provides ISR persistence

Technical Data

System

- Diameter 15″
- Weight <33 Kg
- Angular coverage
- - Azimuth N x 360°
- - Elevation +35° to -85°
- Environmental conditions MIL-STD-810F

Day Channel (HD)

- Camera type Large format digital CCD color camera
- Sensor 2/3″ CCD
- No. of pixels 1394 x 1040
- FOV (continuous zoom)
- - Narrow 0.59° x 0.44°
- - Wide 21.25° x 16°

Thermal Imager

- FLIR Cooled 3rd generation 3-5 µm FPA with 640 x 512 pixels

- FOV

	FLIR A - TOPAZ	FLIR B - LOTUS
Wide	24° X 18°	13.7° X 10.4°
Medium	Continuous	2.0° x 1.5°
Narrow	0.8° X 0.6°	0.61° x 0.46°

Laser Sensors

- Laser Rangefinder (Eyesafe)
- - Wavelength 1.54 µm
- - Rate 1 pps
- Dual Wavelength Laser Target Designator & Rangefinder (LRFTD)
- - Transmitter Diode-pumped advanced technology
- - Wavelength 1.064 µm / 1.57 µm
- - Max pulse rate 20pps
- Laser target illuminator/pointer
- - W avelength 830 nm (NVG compatible)

Interface Communications

- RS422
- MIL-STD-1553
- Ethernet

Video Output

- PAL, NTSC
- Gigabit Ethernet (GigE)

Additional features

- Geo-location using Inertial Measurements Unit (IMU)
- Auto-tracker
- Step & Stare
- Picture In Picture (PIP)

Elbit Systems Ltd.
Advanced Technology Center, P.O.B 539, Haifa 31053, Israel
E-mail: istar@elbitsystems.com www.elbitsystems.com

Follow us on

The logo, brand, product, service, and process names appearing herein are the trademarks or service marks of Elbit Systems Ltd., its affiliated companies or, where applicable, of other respective holders.
© 2016. This brochure contains Elbit Systems and others proprietary information